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Two new species of *Notosacantha* CHEVROLAT from the Oriental Region (*Coleoptera*: *Chrysomelidae*: *Cassidinae*)

JOLANTA ŚWIĘTOJAŃSKA and LECH BOROWIEC
Zoological Institute, University of Wrocław, Sienkiewicza 21, 50-335 Wrocław, Poland, e-mail: cassidae@biol.uni.wroc.pl

ABSTRACT. *Notosacantha kantneri* (Thailand), and *N. sumbawaensis* (Indonesia, Sumbawa), new to the science, are described. Both belong to the *N. vicaria* group.

Key words: entomology, taxonomy, new species, *Coleoptera*, *Chrysomelidae*, *Cassidinae*, *Notosacantha*, Oriental Region.

The genus *Notosacantha* is one of the largest within the subfamily *Cassidinae*. It comprises 237 species (BOROWIEC 1999, BOROWIEC and ŚWIĘTOJAŃSKA 1999), 97 of them were recorded from the Oriental Region. Most species have very small distribution areas, 26 are endemics to the Philippines, 22 occur only on various islands of the Pacific region except Philippines, and 47 are known from continental Asia and adjacent continental islands. Only two species were recorded from both continental and insular parts of the Oriental Region.

In the material studied recently we found two new species of the genus. Both belong to the *Notosacantha vicaria* group which is characterized by the following characters: body oval, elytra with distinct costae, principal tubercle with at least four branches, basal tubercle without transverse branch to humeral tubercle, complete apical costa, and anterior and posterior branches of principal tubercle (or elevation) converging in different points. The group comprises *N. ginpinensis* CHEN et ZIA from S China, *N. singaporica* (SP.) from Singapore, *N. sabahensis* BOR. et ŚW. from Borneo, *N. siamensis* (SP.) from Thailand and Vietnam, *N. flavicornis* (SP.) from "Indes orientales", *N. reinecki* (SP.) from Sulawesi,

N. sulawesica BOR. from Sulawesi, *N. weyersi* (SP.) from Sumatra and Borneo, and *N. vicaria* (SP.) from Andamanes, Ceylon and India. The first four species have explanate margin of elytra without spots, the remainder have more or less complete humeral and posterolateral spots.

***Notosacantha kantneri* n. sp.**

ETYMOLOGY

Dedicated to F. KANTNER, a Czech coleopterist, who collected specimens of the new species.

DIAGNOSIS

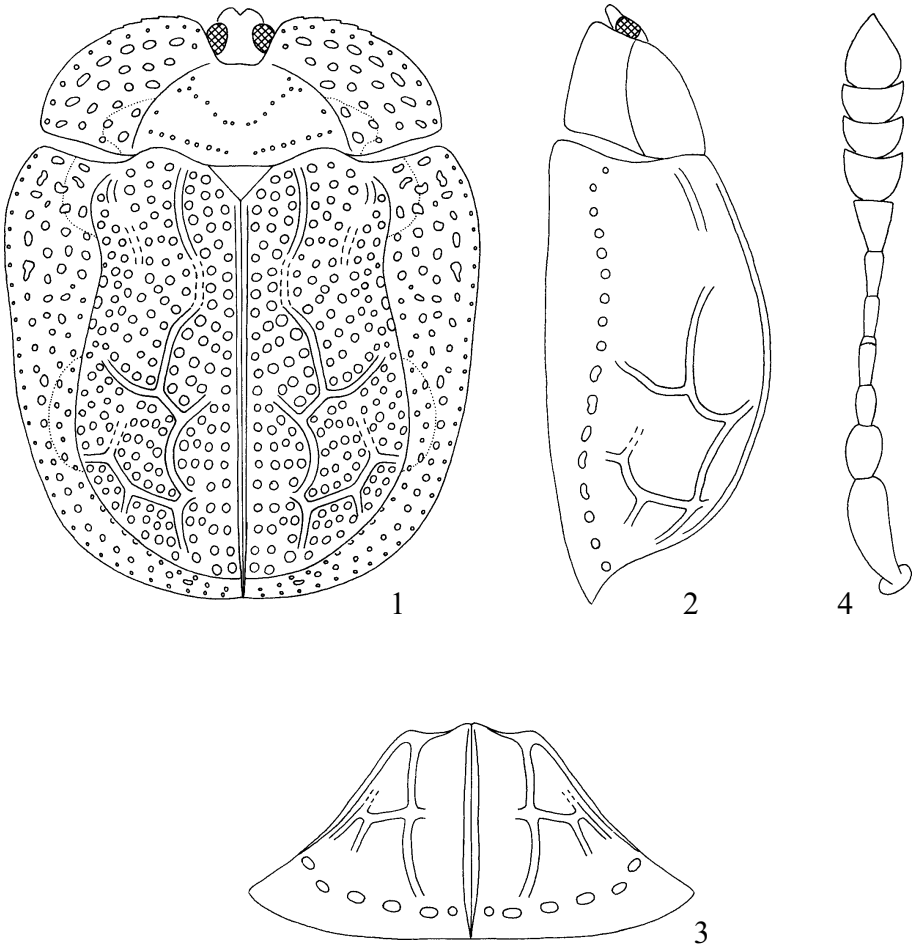
It belongs to the subgroup with maculate explanate margin of elytra. *N. flavicornis* and *N. sumbawaensis* differ in very slim and long antennae, with club only slightly wider than pedicle and segments 8-10 not or only slightly wider than long (in *N. kantneri* antennal club is distinct, broad, with segments 8-10 more then twice wider than long); *N. reinecki* differs in complete furca interna (in *N. kantneri* furca interna is very short, distinct only in basal third; *N. sulawesica* differs in length exceeding 6.5 mm (in *N. kantneri* below 4.7 mm); *N. weyersi* and *N. vicaria* differ in elytral costae more prominent, with slightly marked tubercles (in *N. vicaria* costae are very low, without marked tubercles); *N. weyersi* differs also in costa ultima usually reduced to small tubercle (not reduced in *N. kantneri*); *N. vicaria* differs also in spots of explanate margin of elytra extending at least to 2/3 width of marginalia (in *N. kantneri* only to 1/3 width of marginalia).

DESCRIPTION

Length: 4.2-4.6 mm, width: 3.3-3.7 mm, width of pronotum: 2.8-3.1 mm, length/width ratio: 1.24-1.27. Body short-oval, sides moderately rounded. Head dark brown, only frontal plate yellow. Pronotal disc blackish-brown, the dark colour extending slightly beyond margin of disc, especially on sides of disc, explanate margin yellow. Scutellum yellowish-brown. Elytral disc on top dark brown, on sides gradually dark, marginal intervals black. Explanate margin of elytra mostly yellow with short, brownish humeral spot extending to 1/3 width of marginalia, and very short posterolateral spot extending to 1/5 width of marginalia, border between dark spots and pale marginalia indistinct, diffuse. Ventrites, legs and antennae yellow.

Head with short, semicircular frontal plate, with shallow apical cleft. Pronotum broad, with maximum width at base, sides regularly rounded, basal corners almost straight. Disc before the middle with oblique row of small punctures, and along base also with row of punctures. Explanate margin with large pores, disposed regularly. Base of elytra as wide as base of pronotum. Elytral disc with almost complete set of costae, without tubercles (fig. 1). Dorsal costa complete,

only between basal and postbasal elevation very low, anterior branch slightly curved to suture, posterior branch in basal part slightly oblique, apex slightly curved to suture. Anterior and posterior branch of dorsal costa in principal elevation converging in different points. Sutural branch of principal elevation obliquely rised to suture, extending to first or second row of punctures. Lateral branch of principal elevation complete, extending almost to submarginal row (fig. 2). Apicolateral costa complete, apicosutural costa hardly marked, costa ultima complete. Furca interna very low, forms short elevation extending only to 1/3 distance from apicolateral costa to lateral branch of principal tubercle. Apical part of dorsal costa slightly curved inwards (fig. 3). Humeral costa mostly



1-4. *Notosacantha kantneri*: 1 – dorsal view, 2 – lateral view, 3 – hind view, 4 – antenna

obsolete, forms a short elevation on humerus and another very short and low elevation in posthumeral part of disc. Puncturation between costae moderate, distance between punctures as wide as puncture diameter. Puncturation of explanate margin larger than on disc, disposed regularly, no impunctate "window". Antennae stout, club as long as 1/3 length of antenna, second antennal segment moderately elongate, c. 1.25 times longer than wide, segment 7 c. 1.25 times longer than wide, segments 8-10 distinctly wider than long (fig. 4). Ventrites and clypeus without diagnostic characters.

TYPES

Holotype: THAILAND bor. occ, Khun Yuam env., pr. Mae Hong Son, 28.-31.V.1996, leg. F. KANTNER; paratype: the same data (holotype preserved at the Department of Systematic Zoology and Zoogeography, Wrocław University, Wrocław, Poland, paratype in coll. F. KANTNER)

Notosacantha sumbawaensis n. sp.

ETYMOLOGY

Named after its terra typica, Sumbawa island in Indonesia.

DIAGNOSIS

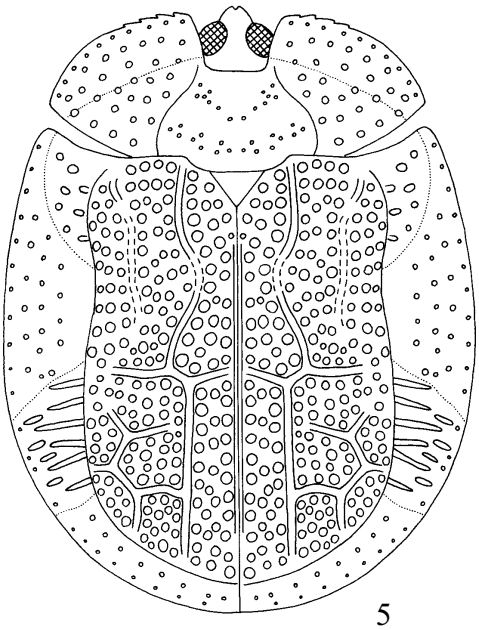
N. sumbawaensis and *N. flavicornis* are the only species of the *vicaria* group with very long and slim antennae, with antennal club only slightly wider than pedicle. *N. flavicornis* differs in yellow pronotum (mostly black in *N. sumbawaensis*), black of elytral disc extending to submarginal row (to marginal row in *N. sumbawaensis*), and spots of explanate margin of elytra yellowish brown (deep black in *N. sumbawaensis*).

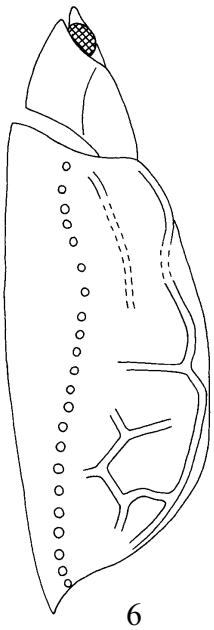
DESCRIPTION

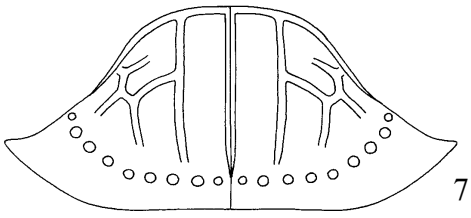
Length: 5.6 mm, width: 4.5 mm, width of pronotum: 3.5 mm, length/width ratio: 1.24. Body short-oval, sides moderately rounded. Head black, only frontal plate yellow. Pronotal disc and inner half of explanate margin deep black, external half of explanate margin yellow. Scutellum centrally yellowish-brown, sides black. Elytral disc black up to marginal row, only tops of costal knobs yellowish brown. Explanate margin of elytra yellow with broad, black humeral spot extending to 4/5 width of marginalia, and broad posterolateral spot extending to margin of elytra, border between dark spots and pale marginalia distinct, sharp. Ventrites, legs and antennae yellow.

Head with short, triangular frontal plate, with shallow apical cleft. Pronotum broad, with maximum width in 2/3 length, sides regularly rounded, basal corners angulate. Disc before the middle with oblique double row of small punctures, and along base also with row of punctures. Explanate margin with moderately large

pores, disposed regularly. Base of elytra as wide as base of pronotum. Elytral disc with almost complete set of costae, without tubercles (fig. 5). Dorsal costa complete, only between basal and postbasal tubercle very low, anterior branch slightly curved to suture, posterior branch slightly oblique inwards. Anterior and posterior branch of dorsal costa in principal elevation converging in different points. Sutural branch of principal elevation obliquely rised to suture, extending to sutural margin. Lateral branch of principal tubercle complete, extending almost to submarginal row (fig. 6). Apicolateral costa complete, apicosutural costa reduced to small tubercle, costa ultima complete. Furca interna incomplete, low, rised almost parallel to lateral branch of principal tubercle, apex of furca







5-8. *Notosacantha sumbawaensis*: 5 – dorsal view, 6 – lateral view, 7 – hind view, 8 – antenna

interna distinctly below knob of principal elevation. Apical part of dorsal costa straight (fig. 7). Humeral costa mostly obsolete, forms a short elevation on humerus and another very low elevation in posthumeral part of disc. Puncturation between costae coarse, distance between punctures narrower than puncture diameter. Puncturation of explanate margin smaller than on disc, disposed irregularly, on dark parts of marginalia coarser than on pale areas. On posterolateral spots punctures form transverse grooves. Antennae slim, elongate, club as long as 1/4 length of antenna, only slightly wider than pedicle, second antennal segment elongate, c. 1.7 times longer than wide, segment 7 c. twice longer than wide, segments 8-10 slightly longer than wide (fig. 8). Ventrites and clypeus without diagnostic characters.

TYPE

Holotype: INDONESIA, Sumbawa, 25 km SE Sumbawa Besar, 15 II 1996, leg. native collector (preserved at the Department of Systematic Zoology and Zoogeography, Wrocław University, Wrocław, Poland).

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